

# [LAYVIKAY]

## Professional Power Amplifier User Manual



[www.layvikay.com](http://www.layvikay.com)

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## **This series of power amplifiers features**

This series adopt a special circuit design, focusing on product stability under conditions of long-term continuous use at full power. As the PCB board uses double-sided wiring through-hole technology, which can reduce false welding of internal components during transportation and overcurrent to damage products by working on full power for a long time. And the circuit layout designed by the computer simulation system can allow the amplifier has over 110dB SNR,

to meet the requirement on touring sound applications, it has high efficiency with high power type. And the damping factor of This series products can be up to 400 or more, the sound is strong and elastic.

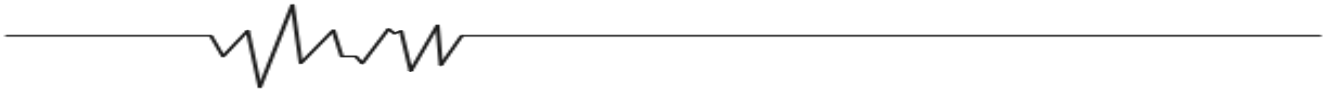
High powerful, extremely strong driving ability.

Adopt an optimized cooling system and high quality cooling fan to ensure stability on long time working at high power.

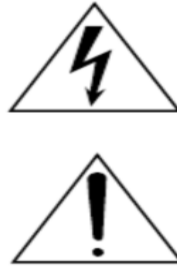
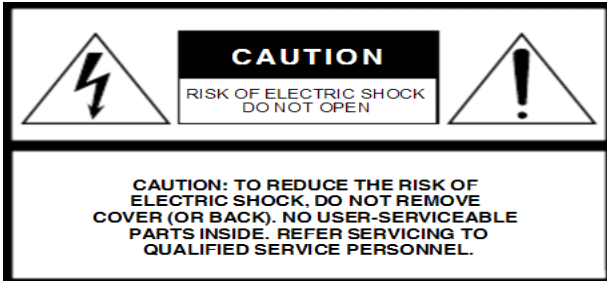
Fan can speed up automatically by variations of temperature in the machine, (when connected with the load impedance is too low or the temperature is too high, the machine will automatically adjust the power supply to reduce the internal resistance. This function is only used on 5 + or above.), can improve the sound quality and protect the machine effectively, and highly improved reliability.

Low distortion, high slew rate, more perfect sound quality and higher resolution.

Dual-channel, can be bridged connected. Fan can speed up automatically by variations of temperature in the machine. Start up delay, overload, short circuit, overtemperature, load short-circuit protection. Limiting control. Independent input control.



## •Explanation of Graphical Symbols



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s closure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

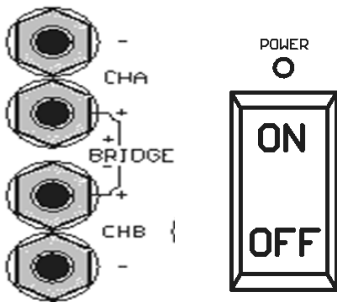
## IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings.
8. Do not install near any heat sources such as, radiators, heat registers, stoves.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug, has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

## WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.**





The lightning flash symbol showing means dangerous live terminals. Only qualified operator can connect this terminal to an extension cord, or use a special lead or wire which can connect safely

**Mark: please turn off power when connect this terminal.**

## Instructions on Safe Operations

### Install:

·The device can only be inserted in the AC power supply socket of the specification or the specification of the specification on the instructions of the user manual.

Otherwise it may cause a fire or an electric shock.

·Pls don't scratch, bend, twist, pull, or heat the power cord, or may damage the power cord, and lead to fire or electric shock.

·Pls don't open the device cover or may result in electric shock. If you think there need any internal inspection, maintenance or repair, please contact your dealer.

·The device has a ventilation hole on the front and back, so as to avoid the internal temperature rising too high. Do not block the ventilation holes.

Blocked ventilation holes may cause fire.

### Operation:

·When connecting the device, pls turn off all musical instruments, audio equipment and speakers, pls use the correct cable, and connect the device as per instructions.

·The supply voltage, please see the label on the back of the machine.

### Connecting the needle socket Division:

XLR type connecting socket should wiring as follows.



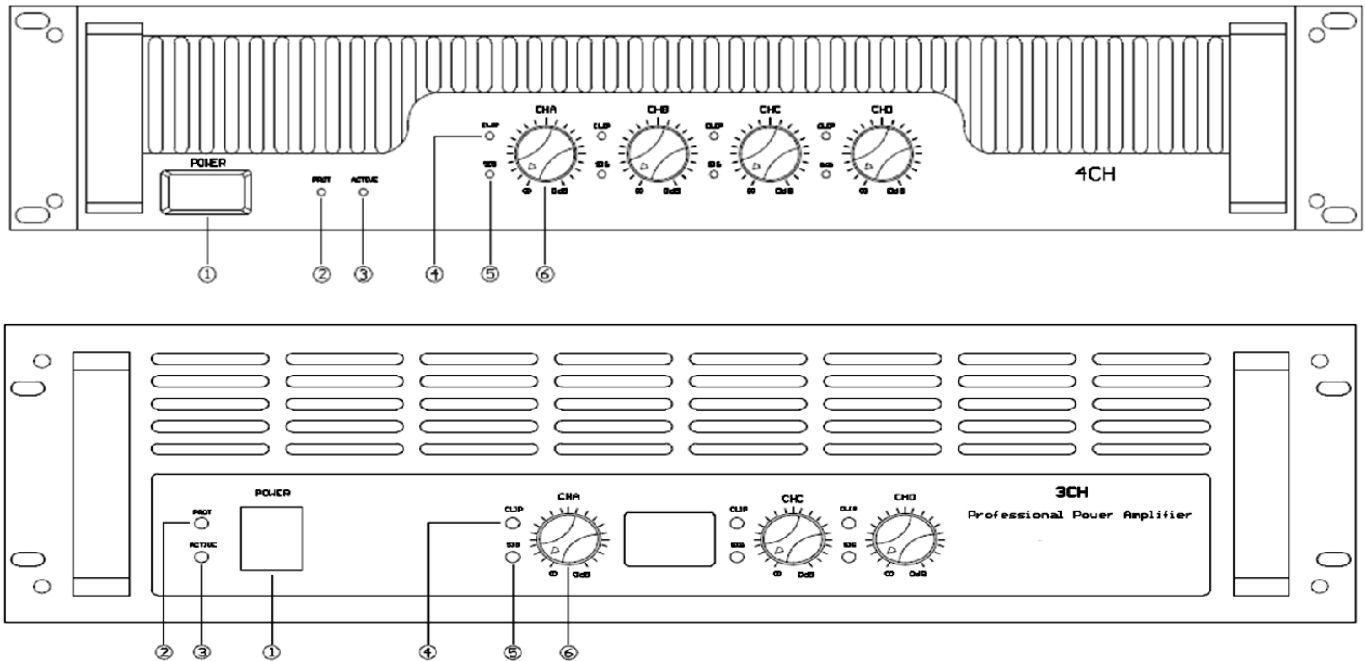
Pin 1: Ground Pin2: Hot (+). Pin3: Cold (-)

**Note: Although this equipment has complete protection for short-circuit and overload, in order to ensure the long term normal operation, pls try to avoid short circuit and overload for output.**



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## Front Panel



### 1) POWER ON/OFF

### 2) CHA CHB CHC CHD Protect indicator lamps(Yellow)

### 3) Power ON indicator lamp(Green)

Indicated the amplifier is turned on when it works steadily.

### 4) CHA CHB CHC Peak value indicator lamps(Red)

### 5) Signal level indicator(Green)

6) Level is used to reduced external signal for the corresponding channel of the amplifier.

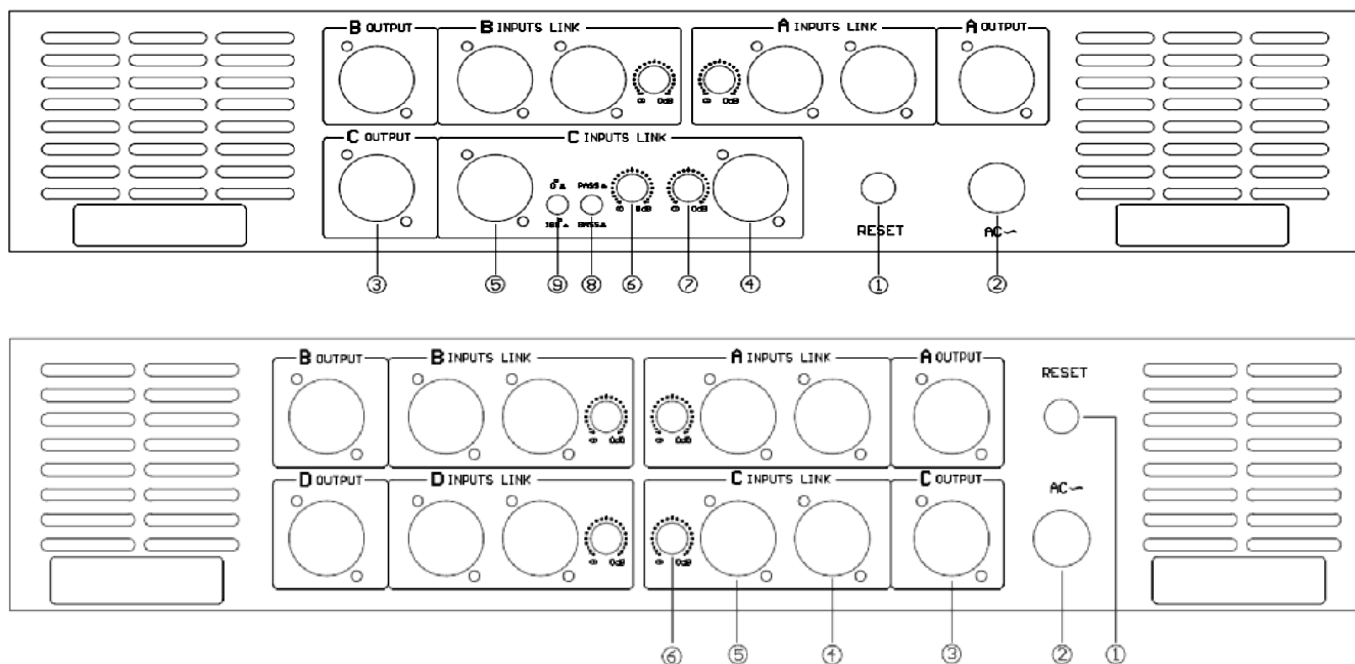
- adjust the volume of the corresponding channel between 8 dB and 0dB.

### Remarks:

When power is turned on initially , the fan will not start or in low speed, but when the heat sink temperature exceeds 45°C, it will start or speed up automatically. When the temperature changes, the fan speed will be automatically adjusted accordingly.

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## Back Panel



### 1) Power fuse

restorable protector for current overload.

### 2) AC ~ power cord with plug.

### 3) CHA CHB and CHC CHD SPEAKON speaker output socket.

When amplifier works in stereo mode, the connection way is PIN +1,-1,+2,-2

### 4) Signal iutput connector. Wiring mode: 1. Ground 2. Signal+ 3. Signal-

### 5) CHA CHB CHC CHD channel input connector. Wiring mode: 1. Ground

2. Signal+ 3. Signal-

### 6) CHA--CHD 8 -0dB control

### 7) Frequency selection 50HZ-180HZ adjustable rarge

### 8) 1. Press off PASS 2. Press on BASS

### 9) Bass phasic 0°-180°



## Technical parameters

Pro Amplifiers		2U	2U	3U	3U
Stereo poewr RATED OUTPUT POWER @1kHz,THD=0.5 %	Stereo power (8ohm)	350W*2+350W*2	600W+350W+350 W	500W*2+500W* 2	800W+500W+5 00W
	Stereo powerr (4ohm)	500W*2+500W*2	850W+500W+500 W	650W*2+650W* 2	1200W+650W+ 650W
Stereo Power: =4Ω		Bridge: =8Ω			
Input Socket:		(XLR Male) / (XLR Female)			
Output Socket:		NEUTRIK(NL4.+1.-1)/ Anti-touch terminals			
Frequencyresponse:		20Hz-20kHz@(0/-0.25dB)			
T.H.D:		<0.05%@1kHz, 10%Rated Power			
IMD		<0.1%@60Hz/7kHz, 10%Rated Power			
Damping Factor :		> 400:1@1kHz,8ohms			
CrossTalk:		=80dB			
Signal NoiseRatio:		>110dB(A)			
Switching rate :		>60V/us			
Input impedance:		10kΩ (unbalanced inputs ) /20kΩ(balanced inputs )			
Input Sensitivity:		0.775V /1V /1.5V			
Workng Temperature:		Workng Temperature -10°C~40°C Storage temperature-30°C ~85°C			
Environment temperature :		=90%			
Voltage:		See label at the back of device			
Sizes(mm)	482(W)X400(D)X88.5(H)mm	482(W)X492(D)X132.5(H)mm			
Weight	23kg	23kg	25kg	25kg	
MainPower Supply	AC/220V-240V AC110V 50Hz-60Hz				


**Correct Operation Instructions**

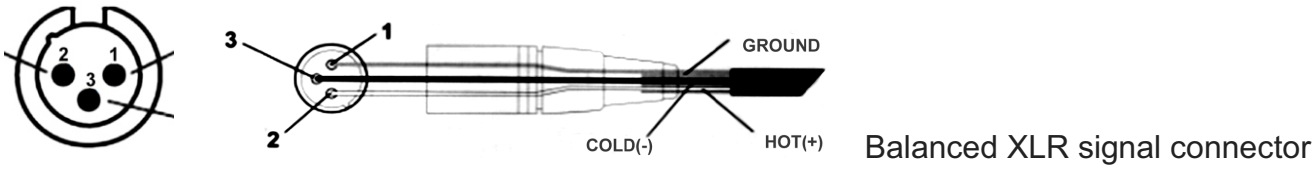

### Function of connection pins

XLR-type connectors should be wired as follows:

Pin 1: Ground

Pin2: Hot (+).

Pin3: Cold (-)

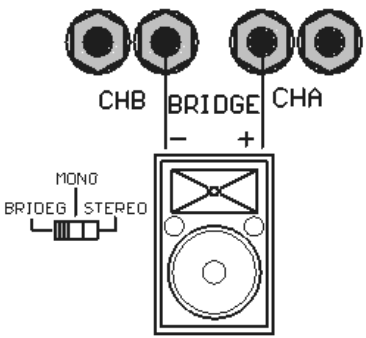
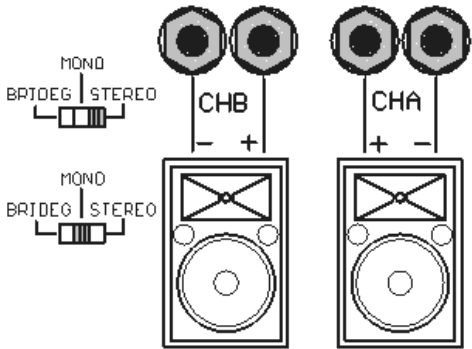


### Speaker Connections

#### Speaker impedance

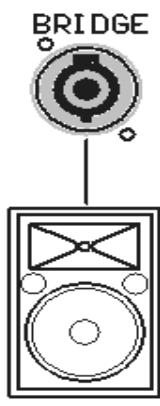
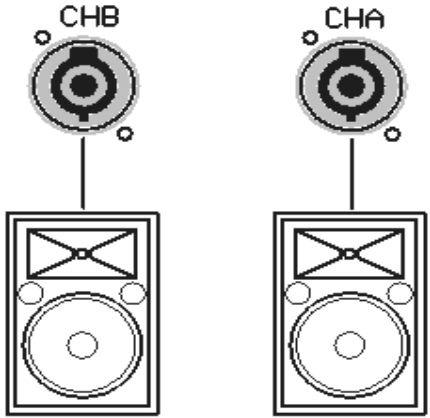
STEREO and MONO connection mode  
When using the anti-touch output jacks

BRIDGE connection mode  
When using the anti-touch output jacks



Use the lowest impedance 4Ω  
When using Speakon connector socket

Use the lowest impedance 8Ω  
When using Speakon connector socket



Use the lowest impedance 4Ω

Use the lowest impedance 8Ω

Remark: Product updates constantly, when the appearance and parameter changed, please refer to the updated samples and without notice.